UNITED NATIONS

ECONOMIC AND SOCIAL COUNCIL

E

Distr.
LIMITED

E/ECA/PSD.6/TF.7
3 December 1989

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Joint-Conference of African Planners, Statisticians and Demographers

January 15-20 1990, Addis Ababa, Ethiopia

PROGRESS REPORT

ON

SHORT-TERM FORECASTING AND OUTLOOK

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I. INTRODUCTION

1. For the past two years after the last joint Conference of African Planners, Statisticians and Demographers, the ECA secretariat has been involved in a series of activities relating to short-term forecasting structural adjustment programmes and other related socio-economic research and policy. By the early 1970s, Africa started to experience a number of economic disequilibria which have become progressively aggravated ever since, so much so that as from the early 1980s the African region as a whole has been in deep and protracted recession which has resulted in a serious social and economic crisis. This situation forced a number of African countries to embark on stabilization and structural adjustment programmes with the encouragement and support of International Monetary Fund (IMF) and the World Bank. Thus, during the period 1980-1989, as many as thirty-three African countries had put in place stabilization programmes under the stand-by arrangement facility of the IMF while 15 countries had structural adjustment programmes under the structural adjustment loans of the World Bank. However, the results so far achieved in most of these countries were not encouraging.

2. In its part, the ECA secretariat has continued to advise and propose to African countries models for short-term forecasting and the African alternative framework for structural adjustment programmes for socio-economic transformation of the African economies. This short paper briefly reports the main activities in short-term forecasting, structural adjustment and other related issues, namely world link outlook activities.

II. SHORT-TERM FORECASTING MODELS

3. After Rwanda and Mauritius, the SAM-based short-term forecasting model is presently being implemented in Congo. Following an expert mission realized in 1987 during which a short-term forecasting model was built on the basis of the peculiarities of the Congolese economy, the second step relating to the implementation of the model into computer was retarded because of the lack of PC computer facilities in the Forecasting Department of the Ministry of Planning and Economic Development. In the subsequent years, the government took steps to acquire a PC MICRAL 60. A large computer facility HP-3000 U48 has already been installed at the Calculus Center of the Ministry of Planning and Economic Development. The ECA experts will meet some time early 1990 with the Congolese counterparts to study and implement the two Congolese models - one short-term forecasting model and one medium-term development model - into the computer facilities so that the simulation works based on the various government development and adjustment policies can be strengthened.

4. Similarly, the Mauritius government has acquired PC microcomputers and the forecasting activities initiated three years ago by ECA and which was temporarily stopped because of the lack of appropriate computer facilities will soon be reactivated, so that the day-to-day simulation activities can be promoted in order to strengthen the planning and structural adjustment capability of the government. In Rwanda, the work

on the short-term forecasting is in advanced stage thanks to technical assistance of the West German which affected an expert to the Ministry of Planning to take up what ECA had built and to the government in the day-to-day simulation of the economic activities of the country. The Rwandese government has already sent two of its experts at the ECA headquarters to get acquainted with the ECA short-term forecasting activities and computer facilities as well as ECA socio-economic research programmes.

III. SHORT-TERM STRUCTURAL ADJUSTMENT PROGRAMMES

5. Some 33 African countries, accounting for more than three-fourths of Africa's population and GDP are implementing major programmes of structural reforms and, in most cases, under the financial and technical assistance of the IMF and the World Bank. These reforms programmes cover a wide array of measures designed to devalue real effective exchange rates, increase agricultural incentives, continue budgetary and monetary restraint, reform public enterprises and reduce the size of public investment programmes while improving the allocation of public funds to sound, high-priority programmes. The depth of these reforms and the persistence of policy makers in implementing them are major achievements of African governments.

6. However, despite all these efforts, the institutional and political difficulties, the social costs and the financial requirements to sustain such an adjustment process are mounting and, in most African countries undertaking such programmes, the social and economic conditions have continued to deteriorate rather than improve. These even were signs that resistance to further reforms is hardening, especially in the face of stagnating or declining per capita consumption.

7. Hence, the ECA secretariat has embarked into a search for an alternative to a structural adjustment programme which will bring about the transformation of the African economies as a part of a process - a process for finding the ways and means of reversing the deterioration in the African economies which has been going on now for more than a decade and installing in its place self-sustained and sustainable development. It was indeed such concerns and apprehensions, together with the need to reestablish a process of recovery and renewed growth and development that provided an impetus for the adoption of the "African Alternative Framework to Structural Adjustment Programmes for Socio-economic Recovery and Transformation" (AAF-SAP), by the Ministers responsible of economic development and social planning and the Ministers of finances. The AAF-SAP was endorsed by the African Heads of State and Government at the OAU Summit last July 1989, and, recently, by the UN General Assembly in its resolution A/44/L.20/Rev.1, as the basis for mapping out African countries' development strategy.

8. The African Alternative Framework centred principally on the need to link economic, social and political issues, reconcile short-term forecasting with the long-term perspectives and focuses on domestic as well as international policy issues in certain specific areas. The strategy recognized the need to build a model that link short-term concerns with long-term development objectives. The ECA secretariat embarked in building a macro-economic model and in amplifying the various alternative policy instruments and measures which are detailed in two of your documents (see E/ECA/PSD.6/ 7) and E/ECA/PSD.6/ 8).

9. The momentum of the African Alternative Framework to Structural Adjustment for Socio-economic Recovery and Transformation is in full gear. The ECA has already initiated three main studies relating to an in-depth analysis of some of the policy instruments of AAF-SAP, namely (1) production subsidies for sustainable growth, (2) scope and limitation for differential interest rates, (3) possibilities and problems of multiple exchange rate systems. ECA is planning a pilot subregional workshop on AAF-SAP for the governments of West African subregion at the request of Mali, the Gambia, Liberia and Ghana in order to assist countries in formulating adjustment programmes. The ECA secretariat has participated in the workshop on the structural adjustment programmes organized by the governments of Lesotho and Uganda, during which the AAF-SAP proposals were explained in order illucidate the adjustment process with transformation. A macro-economic model that fits the characteristics of the Lesotho economy was proposed, which could be used further to simulate the various alternatives policy mixes of the government development programmes.

IV. WORLD LINK OUTLOOK ACTIVITIES

10. The World Project Link Conference was held in Paris (France) at the Institut de Statistiques et d'Etudes Economiques (INSEE) from 28 August to 2 September 1989. More than 60 participants coming from all the regions of the world - Europe, North America, Latin America, Asia and Africa - attended the meeting. The ECA was represented (see in annex UNECA contribution). The purpose of this fall meeting was to review and assess the various country and global outlooks and to seek means and ways of incorporating them in the overall world Link Project. It was announced at this meeting that the Project will move now from the University of Pennsylvania Center to the United Nations Secretariat (Department of International Economic and Social Affairs, DIESA), but the university of Pennsylvania Center will continue to ensure the technical functioning of the Project.

11. Indeed, over the past 15 years, the world economic system has been going through a programme of major adjustments brought on by the continued weakening of the US dollar, volatile interest rates, roller coaster oil prices, plus various forms of floating and managed foreign exchange rate. Continued adjustments since the international Conference in December 1971, which attempted to realign

the foreign exchange value of the major currencies, have on the whole proved to be detrimental to world economic growth. The financial markets of the major countries of the world are linked together through the increasing use of interest rate swaps, currency options, interest rate options, and financial future markets and those factors contribute to the globalization of finance. That the world is shrinking is also evidenced in the amazing speed with which the international telecommunications industry has developed. Linked to this development is the standardization of computer technology and computer system languages around the world, allowing microstaneous transmission of a large volume of complex and adverse transactions in the financial world. Another factor that has hurled the world headlong into the 21st century of global finance is the outbreak of the debt crisis in the developing countries in 1982 and the volatility of world oil prices from 1973 to the present. The international debt crises has forced the integration of the major national markets of the world into a single world financial market, operating at break-neck speeds on a never-closed basis.

12. Adverse economic conditions can and have thrown the world into financial chaos during the 1930s. A major part of the problem is the movement of surplus investment funds being misallocated into medium and long-term debt structures of developing nations to settle what appeared to be short-term balance of payments crises due to oil and other external shocks to the exclusion of structural factors. The integration of world financial markets ripple these shocks through the global community without any reduction in force. International debt renegotiations and new loans need to be rechanneled into restoring economic growth among the developing nations, to improve their position as debtor nations, and to more closely weave them into the basic elements of global finance. Although no known method of assessing national risk is foolproof, the globalization of financial markets sorts out a myriad of economic and political data, basing decisions on a market structured approach to assist in subjective evaluations of a particular country's economic potential. The placement of the surplus investment funds of Japan, W. Germany, Switzerland, the United Kingdom and others in "real property" over the past few years is indeed encouraging, showing the return to investment for the future, not speculation on the future.

13. The Department of Economics of the University of Pennsylvania and the United Nations Department of International Economic and Social Affairs have jointly made outlook forecasts for several countries in the world up to the year 1993 using several well-defined appropriate macro-economic models for individual regions: Developed market economies, Latin America, Africa, Middle East, Asia and Centrally Planned Economies. The African countries which are included in this outlook exercise and for which data on pertinent variables of the model is available include Algeria, Egypt, Ethiopia, Gabon, Ghana Kenya, Libya, Morocco, Nigeria, Sudan, Tunisia, including African Least Developed Countries as a group. The process of the transfer of these models to the UNECA headquarters has already been launched. The next meeting of the meeting of the World Link Project, scheduled to be held in New York in March 1990, will determine the technical modalities of Link of the various forecasting models to the Headquarters and the exchange of information thereoff. The UN/DIESA GDP forecasts for African countries are as follows:

World Project Link - UN/DIESA Post Meeting Forecasts Fall 1989-GDP growth rate in percent

Country	1987 billion local currency	1988	1989	1990	1991	1992	1993
Algeria	104 823	-1.0	2.9	3.4	2.8	3.0	3.3
Egypt	19 330	2.2	2.6	2.4	3.6	3.6	3.2
Ethiopia	7 664	-0.9	5.4	3.1	2.8	3.2	3.1
Gabon	375	0.2	2.2	2.4	4.0	3.4	3.1
Ghana	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kenya	40 222	3.5	2.9	3.2	4.0	3.5	3.7
Libyan Arab Jamahiriya	6 150	0.7	1.7	1.7	2.8	2.7	2.4
Morocco	84 591	6.2	3.5	4.4	3.2	3.6	4.4
Nigeria	20 450	4.0	2.7	1.5	2.0	3.2	3.5
Sudan	2 399	-1.5	-3.6	3.6	3.0	3.5	3.6
Tunisia	3 247	0.3	5.6	3.7	4.1	3.1	3.9
Other African countries a/	33 284	3.3	3.1	3.0	2.8	3.1	2.3
African LDCs b	14 161	3.4	3.1	2.7	2.9	2.6	2.9

Source: DIESA.

a/ Including Angola, Congo, Cote d'Ivoire, Liberia, Madagascar, Mauritania, Mauritius, Mozambique, Reunion, Senegal, Seychelles, Sierra Leone, Zimbabwe, Togo, Cameroon, Zaire, Zambia.

b/ Including Benin, Botswana, Burundi, Central African Republic, Chad, Gambia, Malawi, Mali, Niger.

n.a = not available.

V. CONCLUSION

14. The presently ECA short-term forecasting activities consist of reviewing structural adjustment programmes with particular emphasis to re-orienting such programmes to meet the development objectives and to center them on the human dimension. After a theoretical framework at the continental level, the ECA intends to establish a solid empirical basis for designing a more viable alternative adjustment approach at each individual African country. The ECA secretariat would be central in operationalizing AAF-SAP in individual African countries, in the different subregions and at the regional level. The financial support of UNDP and other donors will be crucial for the realization of the operational phase of AAF-SAP. Short-term forecasting models and outlook will be integrated in such AAF-SAP activities.

ANNEX I

MODELLING ECONOMIC DEVELOPMENT IN AFRICA: ECA RESEARCH ACTIVITIES

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PROJECT LINK FALL MEETING

August 28 to September 1, 1989

Held at INSEE, Paris

MODELLING ECONOMIC DEVELOPMENT IN AFRICA

For the past ten years or so, the ECA secretariat has been heavily engaged in a series of programmes aiming at building development planning models with the sole objective of mapping a future outlook for the African economies. In this context, quite a number of studies were carried out to help the African countries in the formulation of economic strategies and policies within a coherent and consistent national development plan by indicating the policy implications under various alternative development scenarios. This short paper briefly reviews the ECA activities in this area and pinpoints the problems and constraints that arise in the development of the planning models in the African region and the perspectives of Africa's development in 1990-2000.

A. HISTORICAL BACKGROUND

1. Macro-economic modelling of African economies

First, the ECA secretariat started with the creation of the macro-economic projection models which were based on the broad national account data. These models attempted to describe the relationship between the structure of production, the distribution of value added, the consumption, saving and investment, and the external trade (imports and exports). It was the usual two gap model analysis.1/ These models were completed in 1980 and submitted to the first session of the Joint Conference of African Planners, Statisticians and Demographers in March 1980. Various critics were made on these models, among which were that (a) these models were too broad to adequately estimate the structural and behavioural parameters which were the most challenging in several African countries;(b) the choice of national account statistics does not exhaustively relate the dynamics of socio-economic changes and the basic social and cultural relationships concerning development;and (c) the role of population and other socio-economic and cultural variables in the development process was not explicitly expressed in the models. Hence, recommendations were made to supplement these macro- and long-term models by multi-sectoral development planning analysis, taking into account the above comments

2. Multi-sectoral development planning models

Pursuant to these recommendations, the ECA secretariat undertook a study on sectoral output and employment planning on the basis of the two path-breaking method The first was the Keynesian method of visualizing a national economy through a system of national accounts. However, account was taken here on the problems of consistency and interaction between diverse economic activities like production, consumption, saving and investment and to link these activities with government policies. The second method was to bring into the picture the other side of the economic machinery:the structure of prodcution. This aspect was ignored by Keynes because the developed countries which Keynes had as a reference point had already a well-defined production structure where in normal cases most of the production structure was thus considered irrelevant for government policy formulation. In developing countries, however, the analysis of production structure can help to provide a comprehensive picture of the sectoral ramification of the problems of development in these countries. Leontief was the first to show that an economic system can indeed have a well-defined production structure which can be interacted with itself and with the final demand structure.

The study on sectoral output and employment planning was based on the combination of these two economic concepts and was carried out under various methodological approaches with the view to taking account of the peculiarities of the different economic practices in Africa. 2/ As such disaggregative type of analysis generally entails extensive data collection, the exercise was first confined to six countries only.

The first methodology described the closed growth model in which sectoral value added was determined from a structure of sectoral investment allocation and from sectoral capital coefficients. 3/ The model which distinguished two categories of sectors (consumption goods and capital goods), had been applied to Ethiopian economy for an analysis of a scenario of self-sustained growth. The second analytical tool related to a desaggregated macro-economic model in which the principal socio economic activities were detailed in econometric relationships so as to determine their impact on the economy as a whole. Such an approach was used for analyzing and planning those African economies where intersectoral relations were not recorded like in Benin to which the model had been applied.

The third approach developed by the ECA secretariat was the static input-output model where sectoral gross outputs were determined from sectoral final demand which, in turn, was obtained by use of econometric techniques. The application of this analytical tool to Algeria had shown that it could constitute a valuable approach to sectoral elaboration of a development plan as well as for sectoral production and employment policies. The fourth approach, which is the second variant of the the third model, is a model which had an interaction between final demand and production which were determined simultaneously rather than independently of each other. This approach had been used to analyse the revised development plan of Kenya for 1979-1983. The fifth approach is the dynamic input-output model that was developed for Nigeria on the basis of certain assumptions contained in its fourth development plan. The interesting aspect of this analytical tool was that investment was no more exogeneous but determined at the same time as gross sectoral production and employment.

The sixth and last approach attempts to specify a number of real production sector for which an input-output table exists, plus one additional sector for the allocation of investment in the form of equipment and machinery produced by the different sectors. The policy implications can be generated through the changes in values of exogenous variables such as prices of imported goods, total investment expansion in a given period, population growth, and export growth rates and how these changes affect the endogenous variables or through the simulation of structural changes and its impact on the pattern of growth. Structural changes are made on consumption patterns through changes in consumption elasticities, cross-price elasticities population growth rates, etc. This last model, in contrast of the preceding ones, presented the advantages of taking into account the population variable and cultural variables for determination of consumption patterns and had been applied to Morocco on an experimental basis.

All these approaches have been submitted to the second ECA Joint Conference of African Planners, Statisticians and Demographers in March 1982. The comments received from this conference concentrated mainly on the need to incorporate into these multi-sectoral models the analysis of the informal sector and its interaction with the formal sector, the treatment of price and balance of payments variables, the need to initiate the dynamization of the input-output coefficients and the introduction of the energy sector, for improved energy balance in Africa. In addition, it was felt that there was need to complement these long-term multi-sectoral models with short-term forecasting models since many African countries were facing various short-term economic problems and deviations resulting from the 1973 and 1979 world recessions. These forecasting models should enable planners to devise appropriate adjustment measures to internal economic fluctuations while continuing to pursue their long-term objectives and strategies contained in their respective national development plans. In view of the nature of the technicalities of the subjects proposed by the Joint Conference to improve multi-sectoral development modelling, the ECA secretariat dedicated the study of these topics to a technical workshop of experts in order to allow for the African planners to have a deep insight of the problems involved. In the meanwhile, the ECA secretariat had embarked in the building of short-term forecasting models based on a social accounting matrix (SAM) 4/ and in the critically analyzing the problems and crises that were currently beating the African continent. 5/

3. SAM-based short-term forecasting models

The need for SAM-Based forecasting models in Africa was straightforward. In effect, existing national accounting systems such as the United Nations system of national accounts, the French national account system, the European national ccounting system of EEC, material balancing in the Soviet Union, etc. on which some of our previous models were developed focus on the production of goods and services and their utilization as well as the growth aspect of the economies they describe. However, recent trends in African economies have showed the seriousness of problems concerned with satisfying basic needs in education, employment, health, food and water as well as problems relating to identifying industries and social groups. It, therefore, became absolutely necessary to design a means of quantitatively describing economies which simultaneously involve (a) the production of goods and services and the use of such goods and services, especially production structure; (b) income generation, distribution and use. The introduction of social accounting matrix was designed to solve some of these problems. There is a complementarity between SAMs and the prevailing acounting systems in the sense that SAMs involve a fine disaggregation of different accounts such as production as well as institution sectors.

The short-term forecasting exercise was originally conceived to progressively cover all the African countries within a 4 to 5 years period. However, during the two-year pilot period, only eight countries had been selected according to their various economic structure and regional representation, namely Cameroon, Egypt, Ethiopia, Cote d'Ivoire, Rwanda, Sudan, Zaire and Zimbabwe. Four of these countries had agreed to a preliminary mission of

ECA experts, two countries requested for the immediate establishment of short-term SAM-based models in their countries (Rwanda and Mauritius where these models are currently in operation in their major computer facilities).

The difficulty in installing this tool in the African countries lies in (a) the fact that SAM imposes substantial data demand and human and financial resources for data collection, processing and retrieval although it remains a relatively flexible system (b) the need for household surveys and censuses of production for full construction and implementation of a SAM and the need for an institutional machinery to coordinate short-term forecasting activities at the country level; and (c) the need to create the national capabilities to manage these computable general equilibrium models.

The progress report for the implementation of SAM-based forecasting models was presented at the third session of the Joint Conference of the African Planners, Statisticians and Demographers in March 1984. 6/ The comments received by the planners centered on the insufficiency and lack of data as major constraints which, in most cases, do not allow for easy estimation of the parameters needed for handling these general equilibrium models, the insufficient skilled manpower resources, the classification difficulties due to the existence of mixed activities on the main production sectors. With regard to the creation and the reinforcing of the national capabilities for short-term forecasting some African planners proposed that some government officials could be sent to ECA to be acquainted with construction of SAM, as well as the handling of the models and the treatment of data on the computer. This requires efforts on the part of the countries to identify some qualified government officials for training and the commiting of financial resources to cover the costs of travel and subsistence. 7/

In the pursuit of this training activity and conformly to the recommendation of the second ECA joint Conference of African Planners, Statisticians and Demographers, the ECA secretariat organized a workshop on "Multi-secotral Planning Models and Short-term Economic Forecasting for Policy Design in Development Planning and Management in African Countries" which was held in Moscow (USSR) from 15 to 28 September 1986 with the assistance of the Central Economics and Mathematical Institute of lthe USSR Academy of Science (CEMI-As-USSR). The workshop was attended by the representatives of 15 selected countries (Algeria, Benin, Burundi, Congo, Egypt, Ethiopia, Ghana, Kenya, Mauritius, Morocco, Rwanda, Senegal, Tanzania, Togo, and Zambia), the organizations of the UN system (DIESA, ILO, UNCTAD, UNIDO, UNECA), and the experts and professors from the USSR Academy of Science.

The Moscow seminar in its deliberations recommended that (1) positive measures should be taken to integrate the informal sector in the modelling of the development planning process (2) the fact that the developing African countries are facing greater uncertainties due mainly to exogenous shocks of fluctuations in commodity prices, climatic conditions, political and social instability, etc. calls for the need to devise and implement short-term forecasting models which integrate the various financial, price and balance-of-payments variables and which could enable African planners decision-makers

and scholars to analyse and monitor the evolution of their economies and to make the necessary timely adjustments;(3) efforts should be made to organize African data system into the social accounting matrix (SAM) which was regarded by the seminarists as a powerful tool for economic analysis and forecasting atboth micro- and macro-levels and those relating to intersectoral balances (input-output technical coefficients and their dynamization) and (4) modelling of the energy sector should constitute an integral part of the economic and social development planning activities.

ECA endeavoured in the study of these recommended issues and the respective technical papers were presented at the fourth and fifth sessions of the Joint Conference of African Planners, Statisticians and Demographers in 1986 and 1988, respectively. 3/ In addition, efforts were made to incorporate in these development models the dimension of the subregional economic co-operation and integration among African countries countries. 9/ The ECA also published every year a Survey of Economic and Social Conditions in Africa and an Economic Report for Africa which give the economic trends of the region and the economic outlook for the next two years ahead.

It is generally recognized that the fundamental aim of development is the improvement of the quality of life of every individual and that of all the population as a whole. Achievement of such goals would require integrated planning covering all aspects of social and economic life such education, health, nutrition, employment, housing, etc. Considering the importance placed on the welfare of individuals and population as a whole demographic factors must be considered as necessary elements of development planning. The integration of population variables in development policies and plans had been slow in most African countries due to such factors as inadequate understanding of the population-development inter-relationships, lack of recognition of population as an important variable in development, data constraints associated with the non-availability of trained nationals to handle population variables in planning, the absence of adequately developed institutional framework in the population planning process and the lack of well developed methodologies for the integration of population in development planning. The first concern of several developing African countries when they gained their independence was to undertake programmes aimed at improving the lot of people through the expansion of gross domestic product (GDP) and employment without even considering the ultimate affects of such expansion on the people through a more equitable distribution of proceeds of economic growth.

This is why ECA has moved to SAM-based planning models methods which take into account not only the growth process, but also the distribution of that growth among social groups. This method has been successfully implemented in Rwanda where in so-called UMUGAMBA scheme population takes effectively a major place in the development process of the country.

All these development models were designed without fully taking into account the global economy, or, except for trade and balance of payments variables, the influences of the other external factors on the African economies were not thoroughly examined, presumably because of the lack of readily available data of the world economy at the African countries' disposal. The aim to integrate the African development modelling exercise into the world economy for better economic outlook is presently the main preoccupation of the ECA and DIESA. In this regard the cooperation between ECA and DIESA in the world project LINK is being strengthened to the benefit of both the African countries and the world economy. 10/

B. PERSPECTIVES OF AFRICA'S DEVELOPMENT IN 1990-2000

It should be recalled that African Heads of the State and Government have adopted in 1980 the Lagos Plan of Action for the Economic and Social Development of Africa, 1980-2000 which, for the first time, formulated long-term strategies for Africa's development based on self-sustainment and self-reliance. 11/ However, in the years that followed the adoption of the LPA, the African economies experienced a serious socio-economic crisis which was caused by both endogenous and exogenous factors. The external environment was particularly hostile, with increased protectionism, rapid advancements in scientific and technological development all of which hastened the process of product substitution, especially synthetics for raw materials, and the intensification of bilateralism at the expense of multilateralism. Africa's terms of trade deteriorated rapidly the primary export commodity prices declined sharply compared to high import prices of manufactured goods and oil. Recovery in the developed countries has not been transmitted to the developing African countries due to inherent weakness in institutional factors governing market specialization, patent and technology diffusion, and the international deivision of labour and decision-making process. In the wake of the technological leaps in space and nuclear energy and telecommunications revolution in the 1980s, Africa lagged behind technologically and economically. Its prones to natural clamities and external dependence increased and exacerbated. The two exogenous factors - external environment and natural calamities - have interacted in various forms to deepen the crisis facing African economies, with the severe deflationary impact of world's recession during 1980-1982, the great Africandrought of 1983-1985, the collapse of commodity markets in 1986, escalating debt burden and declining real resource flows, the return to drought in 1987 and incidence of natural calanities such as floods, cyclones, locus and grasshoper infestation, etc. Hence, the priority for many African countries has centred more and more on cheer survival rather than on development.

While the developed countries made massive additions to their capital formation both quantitatively and qualitatively, the rate of investment in Africa fell continuously during the 1980s with insignificant additions to capital stocks accumulated in the 1970s. Hence, in many respect, the performance of the African economy was far from satisfactory in the 1980s. The average rate of growth of total regional output decelerated considerably from its 1970s average level of 5.2 per cent to only 1.5 per cent in the 1980s (less than the population growth rate of about 3.1 per cent annually), far below the target

of 7 per cent postulated in the Lagos Plan of Action and in the Third United Nations Development Decade. By 1988, per capita GDP fell to 80 per cent of what it was in 1980. A large number of individual African countries in fact recorded only negative average rates of growth during the decade.

The performance of food and agricultural sector was particularly unimpressive, linked as it is to unfavourable climatic conditions, adverse external factors (fall in agricultural export prices) as well as a pervasive technological ackwardness that continued to prevail during the decade. The performance of the industrial sector was equally unimpressive. Production was confined to a few lines of production of consumption goods, while the intermediate and capital goods subsectors remained weak or even virtually non-existent in many countries. The import content of manufacturing was high, while productivity remained low. Inadequate skills and technical capabilities, management weaknesses, shortages of raw materials and spare-parts continued weaken the productive capacity to expand and grow. Similarly, the sectors in support of agriculture and industry, namely transport, trade, and services, were adversely affected by overall economic decline.

The African governments have hence struggled to reverse the continuing decline in growth of per capita income. They adopted medium-term regional programmes such as "The Africa's Priority Programme for Economic REcovery 1986-1990" (APPER) and the United Nations Programme of Action for Economic Recovery and Development (UNPAAERD) which was supported by the international community at the special session of the UN General Assembly in June 1986. 12 / These programmes attempted to reverse the early development strategy of import-substitution industrialization as the engine of economic growth in Africa and put rather more emphasis on the agricultural sector as a source of economic recovery and growth. However, despite the adoption and implementation of the measures contained in these programmes, the economy of Africa did not improve significantly. The region's total debt obligations have increased instead by 32 per cent in 1988 reaching US$230 billion compared to US$174 billion in 1985 and debt overhang has forced many African countries to adopt severe stabilization, retrenchment and adjustment policies and programmes, often sponsored by IMF and the World Bank.

However, the stabilization and structural adjustment programmes have not succeeded in resolving Africa's development impasse. On the contrary, these programmes entailed considerable political risks and their focus on temporary fiscal and monetary inbalances to the exclusion of the structural issues and problems that are fundamental to the transformation and restructuring of the African economies has not solved the problem of the real and basic needs of the African population in terms of access to basic commodities and services such as food, primary health care, education and employment. Equally problematic was the financial liability entailed in those programmes, as additional loans at hard terms and conditonalities are required merely to service existing loans.

It has become clear that at almost the end of the decade, the objectives of the Third United Nations Development Decade and the Lagos Plan of Action have been far from adequately achieved in several African countries, as Africa was yet to set in motion the process of self-sustainment development and structural transformation.

The lessons that Africa has learnt from this preceding course of development are varied from country to country and wide. However, the presence and persistence of a crisis situation exacerbated by inherent structural deficiencies and weaknesses remains a major cause of concern despite the major policy reforms of various types initiated in the past three decades. Indeed, the fragile structural characteristics and physical limitations of the African region have been the very cause of its stagnation and economic instability and the same factors will continue to frustrate Africa's development unless they are adequately addressed, in addition to already mentioned exogenous factors such as the weather and the international environment.

It was indeed such concerns and apprehensions, together with the need to reestablish a process of recovery and renewed growth and development that provided an impetus for the adoption of the "African Alternative Framework to Structural Adjustment Programmes for Socio-Economic Recovery and Transformation (E/ECA/CM.15/6/Rev.3) by the Ministers responsible of economic development and social planning and the ministers of finances. The programme was endorsed by the African Heads of State and Government at the OAU Summit las July 1989.

The African Alternative Framework centered principally on the need to link economic, social and political issues. reconcile short-term perspectives with the long-ern perspectives and focuses on domestic as well as international policy issues in certain specific areas. The strategy recognized that the ultimate responsibility for development rested primarily on the African countries themselves, but that a clear commitment was required on the part of the developed countries to support their endeavours through policies aired at improving the international economic and political environment and conductive to development, and through international co-operation designed to bridge the socio-economic gaps between the developing and developed countries.

Within this startling reality that has in part led to a rethinking and some fine-turning of Africa's development strategies in the context of the current approach to structural adjustment programmes that the Economic Commission for Africa (ECA) has revised its early perspective study for the 1990s in Africa into the new title "Beyond Recovery: ECA's Revised Perspectives of Africa's Development 1988-2008". It is argued in this study that if Africa is to overcome its short- to medium-term problems and re-establish the basis for sustainable growth in the long-run, the following areas of concern have to be seriously and urgently addressed in the 1990s:

1) Demographic concerns

The current economic and social crises in the African region is taking place in an environment characterized by rapid population growth and uneven population distribution, rapid rates of urbanization, massive unemployment, widening income disparities and progressive pauperization and immiserization

of the population, as population is growing on average at 3.1 per cent annually in Africa compared to 2 per cent in the developing countries as a whole. The resulting increase in demand for food will further distort resource allocation patterns, especially to the detriment of productive sectors' unemployment and underemployment will intensify' essential services such as education, health, transport and housing will deteriorate as they come under severe pressure with the limited resources;and widespread poverty and social unrest will become the norm in the 1990s.

2) The social welfare gap

Another emerging concern is widening gap between Africa and other developing regions in terms of the quality of life. Thus, the human beings should be the focus of development and there is need to promote universal education, health, housing, safe drinking water, hygenic food, adequate nutrition, eradication of endemic diseases, and the provision of services at affordable prices.

3) The human resource gap

Undeveloped and under-developed human resource is recognized as one of the instrumental factors in Africa's overall economic decline. Thus, the overall development concerns in the 1990s will not just be to close the human resource gap in terms of availability and effective rates of utilization, but also in terms of upgrading the quality of the human factors in development. For the full realization of the human factor as the motive force for changes, it is imperative that policies and strategies that aim at employment-oriented development, the deepening of skills and enhancement in productivity as the prime goal of socio-economic development must be initiated.

4) Environment concerns

In Africa, deforestation, soil degradation and desertification are the most serious environmental issues that threaten to cause permanent damage to eco-systems. Thus, the environment must be protected both to maintain natural wealth and its productivity, and to control the disastrous effects of environmental degradation on the lives of people and livestock.

5) The technological gap

Another development concern is the increasing technological gap between Africa and other developing regions of the World, not only in terms of the acquisition of technology, but also in terms and manner of internalizing, adapting and optimizing it. The crucial question is not that of transfer of technology, but the need to reverse the historical dependency relationship with the developed countries for certain types of technology that are generally inappropriate to the African needs. The study urged African countries to devote at least 1 to 2 per cent of their GDP to research and development with a view to upgrading traditional technology and blending it with new and advanced technology through a process of modification and adaptation of imported technology to suit local environmental conditions.

6) The International environment

As long as Africa remains part of an interdependent world, the attainment of the objectives of maximizing the economic and social welfare of its population will, to that extent, be dependent critically on and interrelated with developments in extra-African markets. Thus, one of the major concerns of the African region is the existence of an unjust and inequitable international economic order and the awkward position occupied by the region in the international division of labour and distribution of global wealth. Africa's increasing vulnerability and marginalization to the periphery of the periphery of the world economic system has all the more intensified rather than moderated in the 1980s, and the long-term prospects for the region's development are indeed bleak on the assumption of a continuation of the unfavourable development in the international commodity, and financial markets. Therefore, there is need for fundamental restructuring and structural changes on the principles of equity and justice in order to bring the world economy into a more equitable long-term equilibrium.

7) Trade and commodity issues

Whereas African economies were characterized in the 1960s by an active export sector, and the prices of primary commodities were relatively remunerative while the balance of payments, in a majority of cases, was positive, the situation turned for the worse in the 1970s with the increase in import bills for energy, manufactures and capital goods against a steady declining trend in export earnings, and has quickly climaxed into a crisis situation in the 1980s. The major concern in the 1990s, therefore, is to ensure that Africa's financial relations with the rest of the world serve as a driving force for national and regional development rather than as a vehicle of depression and retrogression, that the external trade must be diversified to include not only primary commodities but manufactured goods as well.

8) Debt and financial flows

Our estimates at ECA show that the debt/GDP ratio, debt/export ratio and the debt service ratio will be much higher in the 1990s than they were in the 1980s unless drastic measures are taken now, and that the overall situation will become severely aggravated as most African countries face the agonizing need to increase borrowing merely in order to service new debt maturities and to reduce arrears in debt service obligations which may increase even further if the current upward trend in the interest rates in the creditor countries are maintained. Thus, one of the major concerns in Africa in the 1990s is the pressing need for an immaginative and comprehensive solution to the debt crisis.

9) Economic integration

That the socio-economic structures of the African countries have remained largely undeveloped after more than three decades of political independence while other developing countries have progressed significantly in

economic development is a serious cause of concern. The colonial heritage of small and micro-states hardly is capable of meeting the challenges of development render many African economies virtually unviable entities, devoid of the necessary dynamism and momentum for economic take off. This balkanization, and fragmentation of markets have generated a host of insurmountable problems in the course of national economic development and indeed continues to fu frustrate the development efforts of many African countries twards self-sustaining development. Thus, one's concern of development in the African region is to foster economic co-operation and integration in order to collectively overcome the development impasses facing the region as a whole, by strengthening and building the institutional capabilities necessary for enhancing efforts towards the establishment of the African Common Market by the year 2000 and beyond, as a priority of the first order. If, as is increasingly evident, the 1990s is likely to be a decade of trading blocks and growing bilateralism and intense protectionism - with the planned consoldiation of Europe into Common Market in 1992, the US-Canada Free Trade Area, the Austrialia-Newzealand free Trade Agreement Area, and an OECD for Asia - then Africa surely must strive harder tat economic integration and co-operation in the 1990s.

Assuming that all these assumptions are met in the 1990s, the study project that developing Africa as a whole will grow by 5 to 6 per cent annually, with agricultural output increasing by 4 per cent higher than the population growth rate and manufacturing industry by 8 to 10 per cent depending on the countries. Otherwise the nightmare that was projected in our previous perspective study would prevail throughout the 1990s.

Reference Notes

1/ See UNECA, "Perspectives of the African Region in the 1980s and Policy Implications", March, 1980 E/CN.14/737); "Projections Results of Some Individual African countries" (E/CN.14/737/Add) "Quantitative Analysis of the Problems and Perspectives of the African LDCs" and "Perspectives of the African Least Developed Countries in the Framework of the Third United Nations Development Decade" (E/CN.14/748), March 1980.

2/ See UNECA, "Sectoral Projections: Some Basic Approaches" (ST/ECA/PSD.2/10), March 1982.

3/ This model is similar to the so-called "Feldman-Mahalanobis Growth Model" which was applied lto the Indian economy by Mahalanobis.

4/ See UNECA-SERPD, "Note on Social Accounting Matrices and their Adaptation in the African Context", Working Paper No. 1/82, November 1982.

5/ UNECA, ECA and Africa's Development, 1983-2008, Addis-Ababa, Ethiopia, April 1983 2hich sketched out a "nightmare scenario" that described the consequences of continuing high population growth and stagnation or declining per capita income in the year 2008 and a "normative scenario" for the improved conditions

6/ UNECA, "Review of Progress on Short-term Forecasting in the African Region" (E/ECA/PSD.3/16), March 1984

7/ In fact, two national experts from Rwanda were in one month training activity at the ECA headquarters in 1987. Some training are provided in the countries themselves, using national facilities

8/ See UNECA, "Integration of the Informal Sector in Multi-sectoral Development Planning" (E/ECA/PSD.5/9/2), March. 1988' "Dynamization of Input-output Technical Coefficient Experiments in Long-term Projection of Economic Growth in Developing African Countries" (E/ECA/PSD.5/9/3), March, 1988' "Report of the Workshop on Multisectoral Planning Models and Short-term Economic Forecasting for Policy Design in Development Planning and Management in African Countries" (E/ECA/PSD.5/9/5) March 1988.

9/ See UNECA, "Sectoral Planning with Subregional Co-operation concerns and Arrangements" (E/ECA/PSD.5/7); "Sectoral Planning within co-operative mechanisms in the Field of transport and Trade Case-study of the Economic Community of Central African States" (E/ECA/PSD.5/7/Add.1); Sectoral Planning in Subregional Arrangements: Transport and Communications, Trade and Finance: Case study of West African States (ECOWAS), (E/ECA/PSD.5/7/Add.2) Sectoral Planning in Subregional Arrangements: Transport and Communication, Trade and Commerce: Case of Preferential Trade Area for Eastern and Southern African Countries (PTA) (E/ECA/PSD.5/7/Add.3); and "Towards the Establishment of Preferential Trade Area in North African States" (E/ECA/PSD.5/7/Add.4) March 1988.

10/ A resolution was passed by the African Ministers of Economic Development Planning in Niamey supporting this ECA/DIESA initiative to bring the African countries models into the World Project LINK (April 1988)

11/ See UN General Assembly A/S-11/14 Annex I or OAU, the Lagos Plan of Action and Final Act of Lagos, ILO, Geneva, 1981

12/ See UN General Assembly A/40/40 and A/S-13/2 Annex, respectively